LONG ISLAND WATER RESOURCES BULLETIN LIWR-7

HYDROGEOLOGIC DATA FROM INVESTIGATION OF WATER RESOURCES OF THE SOUTH FORK, SUFFOLK COUNTY, NEW YORK



Prepared by the U. S. GEOLOGICAL SURVEY

in cooperation with

SUFFOLK COUNTY DEPARTMENT OF ENVIRONMENTAL CONTROL and
SUFFOLK COUNTY WATER AUTHORITY

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By

Bronius Nemickas, E. J. Koszalka, and D. E. Vaupel

U. S. Department of the Interior Geological Survey

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CONVERSION FACTORS AND ABBREVIATIONS

English	Multiply by	To obtain SI ¹ units
feet (ft)	.348	meters (m)
square miles (mi^2)	2.590	square kilometers (km^2)
million gallons per day (Mgal/d)	.04381	cubic meters per second (m^3/s)
· 		milligrams per liter (mg/L)
		micromhos (µmho)

 $^{^{\}mathrm{l}}$ International system of units

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ABSTRACT

Water-quality analyses indicate that, with some exceptions, water on the South Fork of Long Island is acceptable for drinking and most other uses. Total withdrawal for public supply in 1975 was about 2.57 million gallons per day. The upper glacial aquifer contributed 2.36 million gallons per day, and the Magothy aquifer, 0.21 million gallons per day.

The hydrogeology of the South Fork of Long Island is briefly described, and a well-location map, lists of water-level measurements in 174 wells screened in the upper glacial aquifer, and a water-table map are included. Water-quality analyses of water from 51 of the wells and from 20 selected stream sites are presented in tables.

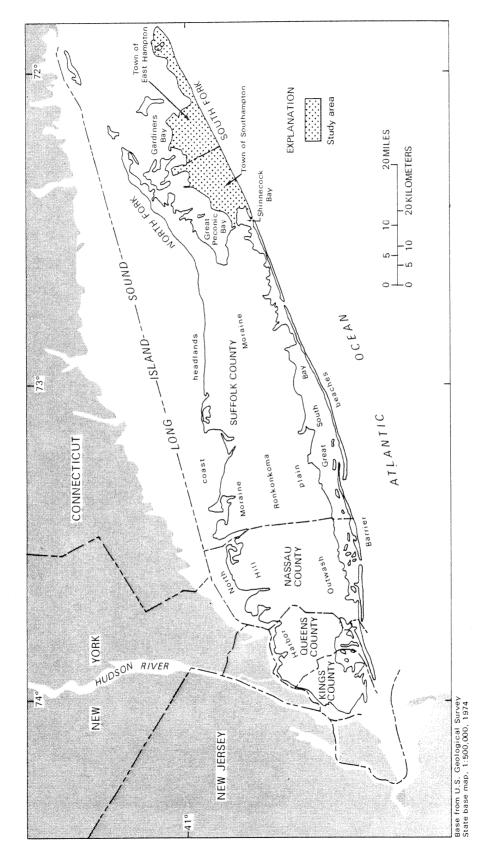


Figure 1. -- Major geographic features of Long Island and area of investigation.

INTRODUCTION

Purpose and Scope

A 3-year water-resources investigation of the South Fork was begun in April 1974 by the U.S. Geological Survey in cooperation with the Suffolk County Department of Environmental Control and the Suffolk County Water Authority. Its purpose was to compile and evaluate geologic and hydrologic data relating to the occurrence, source, availability, movement, and chemical quality of water in both the upper glacial and Magothy aquifers, the major sources of public-supply water on the South Fork. As a part of this study, streamflow and water-quality data were collected to evaluate the quantity and quality of water in the study area. This report presents the hydrogeologic and chemical data that are currently available.

Location and Extent of Area

The South Fork forms the southeast tip of Suffolk County and lies between 71°50' and 72°35' W long. and 40°50' and 41°06' N lat. (fig. 1). It includes the Town of East Hampton and the eastern part of the Town of Southampton. The area is bounded on the north by Great Peconic and Gardiners Bays, on the east and south by the Atlantic Ocean, and on the west by Shinnecock and Great Peconic Bays. The area of the South Fork is 137 square miles.

Method of Investigation

Data on ground-water levels were collected in April and October 1974 and April 1975 (table 1) from 174 observation wells screened in the upper glacial aquifer throughout the South Fork (plate 1) and were compiled to make a water-table map (plate 2).

Physical and chemical analyses were made for both ground water and surface water. Chemical analyses of water samples from 51 wells are presented in table 2, and those from 20 stream sites, in table 3. The analyses were made by the U.S. Geological Survey laboratory in Albany, N.Y. Location of the wells and stream-sampling sites are shown in plate 1.

Acknowledgments

The authors extend thanks to the Suffolk County Department of Environmental Control and the Suffolk County Water Authority for their cooperation in this phase of the investigation and to a student group from Princeton University, under the supervision of Jeffrey Bart, for their assistance in basic-data collection.

GEOHYDROLOGY

Geology of the South Fork

The geology of the South Fork was first studied by Fuller (1914); his report included a surficial geologic map and descriptive information on the Pleistocene units. Information on most of the subsurface geology of the South Fork was presented in Suter, de Laguna, and Perlmutter (1949). Since these early studies, many other investigators have written on the geology and hydrology of the South Fork; some of these reports include Perlmutter and DeLuca (1963), Holzmacher, McLendon and Murrel (1968), Fetter (1971), Jensen and Soren (1974), and Berkebile and Anderson (1975).

The South Fork is underlain by unconsolidated deposits that rest unconformably on the Precambrian(?) basement complex (fig. 2). The unconsolidated formations strike east-northeast and dip to the south. Depth to basement decreases eastward along the length of the South Fork from approximately 1,450 to 1,150 feet. The basement is overlain by the Raritan Formation, which consists of the Lloyd Sand Member and an overlying clay member of the Raritan Formation. The Magothy Formation-Matawan Group, undifferentiated, overlies the Raritan Formation, and the Monmouth Group overlies the Magothy-Matawan unit. These three units are of Late Cretaceous age and, except for the Monmouth Group, are continuous throughout the study area; the Monmouth Group occurs only at the south edge of the area (Jensen and Soren, 1974, sheet 1).

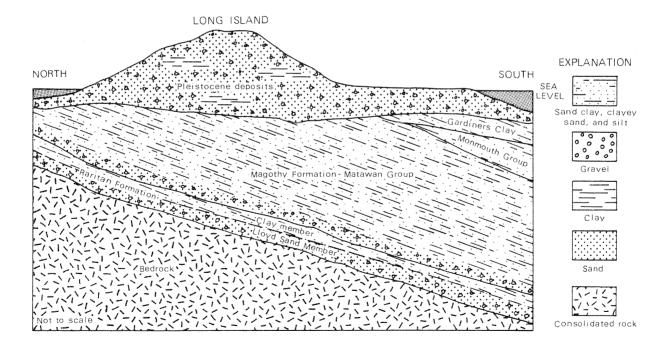


Figure 2.--Generalized geologic cross section of the South Fork.

The Pleistocene deposits of the South Fork are composed of several glacial, periglacial, and interglacial units, including the Gardiners Clay, the Montauk Till Member of the Manhasset Formation, a late Wisconsin drift, and loess (Nieter, Nemickas, Koszalka, and Newman, 1975). The surficial geologic units consist of outwash deposits, morainal deposits including till, and Holocene deposits. The Holocene units consist of shore, beach, and salt-marsh deposits throughout the area and artificial fill at certain locations.

Hydrology of the South Fork

Water is continually being exchanged in a circulatory pattern between the ocean and the atmosphere. In general, the amount of precipitation on the South Fork determines the amount of water available for use in the area. Some of the precipitation on the land evaporates, some is absorbed by plants and is later transpired back to the atmosphere, some flows overland to streams, and some infiltrates to become ground water. Some of the ground water discharges into streams that flow to the ocean; however, most of the ground water discharges directly into the ocean. From the ocean, the water is evaporated back to the atmosphere.

Fresh ground water on the South Fork originates from local precipitation. Recharge to the ground-water reservoirs results from infiltration of precipitation through the soil and to the water table. The amount of water that reaches the water table varies throughout the year and is controlled by precipitation type, frequency, and intensity; by the slope of the land surface; by the geology, soil moisture, amount and kind of vegetal cover; and by air temperature.

The water table generally rises from the end of October to the end of April, when vegetation is dormant and evapotranspiration is thus at its lowest. On the South Fork, the water table generally begins to decline in May and reaches its lowest levels in early October. The maximum seasonal water-table fluctuation on the South Fork is less than 3 feet.

Ground-Water Data

Water-level measurements in 174 wells during April 1975 (table 1) were used to prepare a map of the water table on the South Fork (plate 2). In the western part of the study area (plate 2) is a ground-water mound, whose maximum altitude is 24 feet. Anomalous water levels as high as 66 feet have been recorded within this area. It is possible that these water levels result from variations in hydraulic conductivity of the geologic units in the region. The authors are now investigating the hydrogeologic conditions of this area. East of this mound, the water table reaches a maximum altitude of 13 feet and slopes downward to sea level at the shore. Water levels may be higher in places for which data are lacking; this is particularly likely north of Hardscrabble. Smaller water-table mounds have been observed throughout the study area; for example, in North Haven, Hither Hills, and Montauk. These water-table mounds have a maximum altitude of less than 4 feet.

Surface-Water Data

Stream discharges were measured periodically at 20 sites in the study area in April and October 1974 and April 1975. The locations of these sites are shown on plate 1, and the discharges measured are given in table 4. The discharges of Cold Spring Pond tributary measured in October 1974 and April 1974 were not recorded because the water's conductivity indicated tidal conditions at the site.

It was difficult to obtain accurate discharge measurements of streams that flow into bays and ponds along the south shore because from late fall to early spring, the mouths of these bays and ponds are closed by sand deposits that inhibit surficial freshwater flow into the ocean. Measurements during these periods show a decrease in velocity and an increase in cross-section area, which causes inaccuracies in the discharge values. However, such measurements may be used as approximations.

Water-Quality Data

For all purposes, the quality of water is as important as its availability. All water in its natural state contains minerals in varying proportions as a result of its having leached soluble material from the atmosphere, soil, and rocks through which it moved. Factors that affect the chemical quality of ground water are the composition of material with which it comes in contact, the duration of contact, water temperature and pressure, and presence of domestic wastes and fertilizers in the ground.

The ground water and the fresh surface water on the South Fork are for the most part of suitable quality for drinking and most other uses. Some constituents may occur in objectionable concentrations; for example, iron and chloride, which may be damaging to machinery, and nitrate, which may be harmful to infants. Chemical analyses of water samples from 51 wells in the upper glacial aquifer (Pleistocene deposits) and from 20 stream sites are listed in tables 2 and 3; locations of the sampling sites are shown in plate 1. Chemical-quality data for the Magothy aquifer were not included because the observation-well network has no wells screened in that aquifer.

Tables 2 and 3 present the chemical constituents of water in the upper glacial aquifer and in the streams that discharge from it. The following paragraphs discuss the negative effects of high concentrations of some of these constituents.

 $\underline{\text{Silica }(\text{SiO}_2)}$.--Silica can precipitate in steam boilers and form a scale that will retard the transfer of heat. Otherwise, silica is of minor importance in restricting water use.

Water samples from the upper glacial aquifer had silica concentrations that ranged from 0.5 to 21 mg/L, and most samples contained less than 15 mg/L. Samples from the streams ranged from 0.1 to 15 mg/L, and most samples contained less than 10 mg/L.

Chloride (Cl).--The chlorides of calcium, magnesium, sodium, and potassium are highly soluble. Excessive chloride concentrations can harm some crops and are corrosive to many metals. Concentrations greater than 250 mg/L can be tasted and are considered excessive by the U.S. Public Health Service (1962, p. 7). The U.S. Environmental Protection Agency's "National Interim Primary Drinking Water Regulations" (1975) does not list a limit for chloride concentration.

Water samples from the upper glacial aquifer had chloride concentrations that ranged from 4.1 mg/L to more than 300 mg/L, and most samples contained less than 25 mg/L. Samples from the streams ranged from 8.9 to 500 mg/L, and most samples contained less than 25 mg/L.

Nitrate (N).--High concentrations of nitrate in water can cause cyanosis (blue-baby disease) in infants. Cyanosis is caused by methemoglobinemia. The U.S. Environmental Protection Agency, "National Interim Primary Drinking Water Regulations" (1975, p. 59570), has established a maximum safety level of 10 mg/L for nitrate as nitrogen, which is also the limit set by the U.S. Public Health Service (1962, p. 7). The nitrate (as N) content of native ground water on Long Island was estimated by Perlmutter and Koch (1972) to be 0.22 mg/L; greater concentrations may indicate water contamination by sewage, fertilizers, or organic matter.

Water samples from the upper glacial aquifer had nitrate concentrations (as N) that ranged from 0 to 15 mg/L, and most samples contained less than 1 mg/L. Samples from the streams ranged from 0 to 6.7 mg/L, and most samples contained less than 1 mg/L.

<u>Calcium (Ca) and Magnesium (Mg).</u>—Calcium and magnesium are readily soluble in water high in carbon dioxide. Water hardness increases with the concentration of calcium, magnesium, or both. These constituents also tend to form boiler scale.

Water samples from the upper glacial aquifer had a total calcium and magnesium concentration that ranged from 1 to 133 mg/L, and most samples contained less than 25 mg/L. Samples from the streams ranged from 2.9 to 40.7 mg/L, and most samples contained less than 10 mg/L.

Iron (Fe) and Manganese (Mn).—Water samples collected from wells that were closely spaced and of similar depth sometimes had widely differing iron and manganese concentrations, and frequently the iron and manganese concentrations in water from the same well varied through time. Erratic variations in iron concentration have several possible explanations. Colloidal iron or fine iron oxide can be picked up by water from the aquifer or from incrustations on the well screen or the well casing, and such iron in the sample may be reported as a true constituent of the water. Surging or pumping of a well may also affect the iron concentration in water samples by dislodging incrustations and iron bacteria from well screens or casing.

Concentrations of iron or iron and manganese as low as 0.3 mg/L can interfere with efficient operation of many industries. Those frequently affected are food manufacturing, textile, carbonated beverage, high-grade pulp and paper, and dyed-fabric industries. The U.S. Public Health Service (1962, p. 7) has established a maximum concentration of 0.3 mg/L for iron and 0.05 mg/L for manganese for drinking water. The U.S. Environmental Protection Agency's "National Interim Primary Drinking Water Regulations" (1975) does not list iron and manganese. Although the average diet contains substantial amounts of these metals, they are listed by the U.S. Public Health Service because of their adverse economic aspects and the tendency of iron to stain fabrics and porcelain.

Water samples from the upper glacial aquifer had total iron and manganese concentrations that ranged from 0.05 to 38 mg/L, and most samples contained a combined concentration of less than 3 mg/L. Samples from the streams ranged from 0.02 to 2 mg/L, and most samples contained less than 0.5 mg/L.

Sodium (Na) and Potassium (K).—Most natural waters on the South Fork have low concentrations of sodium and potassium, generally less than 20 mg/L. Once sodium is leached from the sediments, it tends to remain in solution. Potassium recombines easily with other products of weathering and forms less soluble compounds; thus, the potassium concentration is generally lower than the sodium concentration in natural waters. The compounds of these metals are not harmful to animal life in the concentrations commonly found; however, concentrations greater than 100 mg/L, together with bicarbonate, may cause foaming in steam boilers. High sodium-salt concentration in irrigation water can reduce the permeability of the soil.

Water samples from the upper glacial aquifer had combined total sodium and potassium concentrations that ranged from 4.8 to 187 mg/L, and most samples contained a combined concentration of less than 20 mg/L. Samples from the streams ranged from 6.9 to 77.8 mg/L, and most samples contained less than 15 mg/L.

<u>Sulfate (SO₄).</u>--Sulfate tends to form a hard scale in boilers when the water also contains calcium and magnesium, and this increases the cost of softening the water. Water containing more than 250 mg/L sulfate can have a laxative effect.

Water samples from the upper glacial aquifer had sulfate concentrations that ranged from 2.8 to 130 mg/L, and most samples contained less than 50 mg/L. Samples from the streams ranged from 4 to 78 mg/L, and most samples contained less than 15 mg/L.

<u>Fluoride (F).</u>—The maximum level for fluoride is variable and is established in proportion to the annual average of the maximum daily air temperatures for the location. This level ranges from 1.4 mg/L in the warmest areas to 2.4 mg/L in the coldest. The recommended optimum fluoride concentration is 50 percent of these values.

Water samples from the upper glacial aquifer had fluoride concentrations that ranged from 0 to 0.3 mg/L, and most samples had concentrations of less than 0.2 mg/L. Samples from the streams ranged from 0 to 0.4 mg/L, and most samples contained less than 0.2 mg/L.

Bicarbonate (HCO_3) .—Bicarbonate has a minor effect on water use except for high-pressure-boiler feed and some industrial uses.

Water samples from the upper glacial aquifer had bicarbonate concentrations that ranged from 0 to 55 mg/L, and most samples contained less than 25 mg/L. Samples from the streams ranged from 0 to 35 mg/L, and most samples contained less than 15 mg/L.

<u>Dissolved solids.</u>—The dissolved-solids concentration represents an approximation of the total amount of dissolved mineral matter in a water sample.

Water samples from the upper glacial aquifer had dissolved-solids concentrations that ranged from 16 to 587 mg/L, and most samples contained less than 200 mg/L. Samples from the streams ranged from 38 to 221 mg/L, and most samples contained less than 100 mg/L.

<u>Hardness.</u>—Most of the hardness in water is caused by calcium and magnesium. Other constituents, such as iron, aluminum, zinc, and free acid also cause hardness; however, these are not usually present in quantities large enough to have any appreciable effect. A classification of hardness, in mg/L (as $CaCO_3$), used by the U.S. Geological Survey, is as follows (Durfor and Becker, 1964):

soft0	to	60	mg/L
moderately hard61			
hard121	to	180	mg/L
very hardabo	ve	180	mg/L

Water in the upper glacial aquifer ranged in hardness from 3 to 200 mg/L, and most of the water in the study area was soft to moderately hard. Samples from the streams ranged in hardness from 10 to 110 mg/L, and most samples contained less than 25 mg/L.

pH.--The degree of acidity or alkalinity of water is indicated by the hydrogen-ion concentration and is expressed as the pH value. A scale from 0 to 14 is used to denote the degree of hydrogen-ion concentration. A pH of 7 is neutral; values below 7 are acid, and those above 7 are alkaline. Water having a pH of less than 6 is likely to be corrosive to metal.

The pH of water samples from the upper glacial aquifer ranged from 4.4 to 7, and the pH of samples from streams ranged from 4.6 to 7.4.

Specific conductance. -- The specific conductance of water is a measure of its capacity to conduct electricity. Conductance increases with the concentration and degree of ionization of the different minerals in solution and with the temperature of the water.

Specific conductances of water samples from the upper glacial aquifer ranged from less than 50 to 1,130 μmho , and samples from the streams ranged from 60 to 1,830 μmho .

Ground-Water Pumpage

The major estimated withdrawals for public water supply for the South Fork from 1970 to 1975 are given in table 5. In 1975, 2.4 million gallons per day was withdrawn from the upper glacial aquifer, and 0.21 million gallons per day was withdrawn from the Magothy aquifer. The breakdown of total withdrawals for each year by aquifer shows that the upper glacial aquifer is the major source for public water supply. The increase in withdrawals from the upper glacial aquifer in 1974 and 1975 in East Hampton by the Suffolk County Water Authority is attributed to additional service to users who were previously supplied by the Amagansett and Montauk Water Companies. The Montauk Water Company and the Amagansett Water Company were taken over by the Suffolk County Water Authority in May 1973 and May 1974, respectively. The locations of public-supply wells and well fields are shown on plate 1.

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TABLE 1.--WATER LEVELS IN WELLS, FEET ABOVE MEAN SEA LEVEL

WELL	LATITUDE AND		DATE AND	DATE AND	DATE AND
NUMBER	LONGITUDE ²	OWNER3			- 51
s 1512.	072093	EASTHAMPTON FD	-74 4.	10-21-74 4, 05	4-22-75 4.47
\$ 2810.		HARBOR	4- 9-74 2.21	10-21-74 1, 23	2-75 1.
\$ 2961.		SAG HARBOR FD	4- 9-74 1.66	10-21-74 1.00	4-22-75 0.96
\$ 6659.			4-8-74 3.27	-74 2.	4-21-75 3.28
S 6660.			-74 3.	22-74 2.	4-21-75 3.35
S 6661.	405418, 0722130,		8-74 3	22-74 3.	21-75 4.
s 8287.	405917 0721817	SCOLUMNICA FU	4-8-74 0.18	10-22-74 5.30	4-21-75 5.98
S 628			0-74 5	21-74 4	-21-75 3
\$ 8289.			. 4	21-74 5.	4-21-75 4.85
\$ 8738.	405609, 0721431,	EASTHAMFTON FD	4 4.	22-74 3.	-75 4.
S 8831.		SOUT	4-10-74 7.57	-74 6.	1-75 7.
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(A)			10-74 6.	74 5.	-75 7.
5 8837.			-74 9.	-74 7.	75 8.
2000 2000 2000 2000 2000 2000 2000 200		BRIDGEHAMPTON FD	4 11.	-74 10.	5 11.
S 8839		TOLER	10-74 7.	7 7.	(C)
S 8843	405908.0721100.	LIN	-74 10.	9	4-21-75 10, 16
S 8844	405948, 0721712,	HARBOR	-74 6.	4 4.	4-22-75 6.16
0 00000 0 00000 0 00000	410055, 0721839,		-74 2.	4	
\$10227.		S	-74 9.	4 ⊗	4-22-75 9, 45
\$10228.		EASTHAMPTON FD	-74 1.	-74 3.	75 2.
810229.	410008.0721908. 405934.0733133	SAG HARBOR FD	9-74	21-74	22-75 2.
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815193			0-74 4	21-74 0.	4-22-75 V TO
\$15332.		HAMPTO	4	-74 4	-22-75 4
815333.			. 4. . 3.	4- ري	-22-75 6
S15507.	405527, 0721805,	BRIDGEHAMPTON FD	4-10-74 8.73	-74 7.	-75 8 9
815508.		NOYACK FD	4-10-74 2.99	21-74 2.	-75 2.
815509.		NOYACK FD	4- 9-74 6.84	10-21-74 4.89	75 6.
815510.		NOYACK FD	4- 9-74 7. 60	1-74 6.	-75 5.9
816117.		AMAGANSETT FD	4-8-74 0.80	10-21-74 1.10	-75
S16118.		AMAGANSETT FD	-74 2.	10-21-74 2.10	-22-75 2.
516119.		on.	4-8-74 2.51	10-21-74 2.24	4-22-75 2.12
\$16120.	072075	HOLE	4- 9-74 1.98	10-21-74 1.15	4-22-75 0.63
516121.	072075	HOLE	4	10-21-74 3.97	4-22-75 4.87
		بنا	1	10-21-74 3.83	4-22-75 3, 53
1/1	0.	_	4-8-74 1.11	10-21-74 0.98	4-22-75 0.75
517175.	410014, 0720336,	AMAGANSETT FD	4-8-74 0.55	10-21-74 0.47	4-22-75 0.18

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-22- -21-	4-21-75	!	CAL	733-/	-21-7	_	4-21-75	4-21-75	-21-7		-29-7	-21-7	-21-7	-21	4-21-75	4-21-75	4-21-75	4-21-75	4-22-75	4-21-75	4-23-75	4-23-75	4-23-75	4-21-75	4-21-75	4-21-75	4-21-75	4-21-75	4-21-75	4-21-75	4-21-75	4-21-75	4-21-75	4-21-75	4-21-75	4-21-75	4-21-75	4-20-75	4-21-75	4-21-75	1-7	4-21-75
0.98 2.78	2, 15					0.94 0.00				21. 46													8. 62		10.61															7.72	0	တ
10-21-74	10-23-74	21-7	21-7	21-7	10-23-74	10-23-74 10-22-74		7-	10-21-74	10-22-74	1	10-22-74	7	10-23-74	10-23-74	10-23-74	10-23-74	10-23-74	10-21-74	10-21-74	10-23-74	10-23-74	10-23-74	10-23-74	10-23-74	10-23-74	10-22-74	10-22-74	10-22-74	10-22-74	2-7	_7	7	1-7	N	N	10-22-74	10-22-74	10-23-74	10-22-74	10-23-74	10-21-74
ં લં	8i N	ហ់		ń.	 i		ini	Ø	લં															ហ	10.				ø,			⊣	ത്	ΝÍ						8.57		
4-8-74	4- 9-74	-10	ф. 	1-6 -	4-8-74	4-20-74	4-10-74		4-8-74	4-10-74	4-10-74		-10-7	4-8-74	4-8-74	4-8-74	4-8-74	4-8-74	4- 9-74	4-10-74	4-10-74	4-10-74	4-10-74	4-10-74	4-10-74	4-10-74	4-10-74	4-10-74	4-10-74	4-10-74	7	1-8-7	8-7	-7	4-8-74	4-8-74	4-8-74	4-8-74	7-	4-8-74	4-8-74	4-8-74
AMAGANSETT FD SOUTHAMPTON FD	سا سا	i iii.	FD	AMAGANSETT FD		SOUTHAMPTON FU					SOUTHAMPTON FD	SOUTHAMPTON FD				SOUTHAMPTON FD		SOUTHAMPTON FD	SAG HARBOR FD	ш	EA	SCDPW	TOWN OF EASTHAMPTON	8			TOWN OF EASTHAMPTON		TOWN OF SOUTHAMPTON	SCDFW		SCDEC		NORTH SEA FD	SCDEC	SCDEC	SCDEC	SCDEC	SCDEC	SCDEC	SCDEC	SCDEC
410037, 0720347, 405442, 0722022.	072275		. 072104			405256, 0722821,	j ().		405309, 0722634,	405715, 0721937,	405416, 0722713,				405232, 0722608,	405252, 0722608,	405223, 0722538,	405248, 0722535.		405742, 0722323,	405913, 0720646,	410218, 0720933.	405924, 0720947,	410123, 0721303,	405915, 0721215,	405828, 0721151,		- 1								405740, 0721900,	405618, 0721805,	405704, 0721659,		405501, 0722155,	405606, 0722357,	405644, 0722201.
\$17176. \$18021.	\$18022. \$18024	S18026.	S19891.	520192.	821555.	\$21556. 021557	021007	822499.	\$22500.	833921.	534643.	534644	534645.	836401.	836402.	\$36403,	836404	836405	538341.	846359.	846518.	846519.	846520.	846521.	846522	846523.	846524.	846525.	846526.	10	846529.	847235.	847236.	548255.	848425.	548426.	842	548428	8	548430.	848432.	848433.

1 s, suffolk county 2 should be read 40°57'26", 072°09'37" 3 fD, fire Department

TABLE 1.--WATER LEVELS IN WELLS, FEET ABOVE MEAN SEA LEVEL (CONTINUED)

WELL NUMBER ¹	LATITUDE AND LONGITUDE ²	OWNER 3	DATE AND WATER LEVEL	DATE AND WATER LEVEL	DATE AND WATER LEVEL
548437.	405831, 0721712.	SCDEC	-74 14.	10-22-74 13.02	4-21-75 13.71
548438.		SCDEC	46	23-74 64.	4)
848439		SCDEC	- 8-74 4.	22-74 3.	-75
848440,		SCDEC	-74	23-74 3.	4-21-75 4.64
548441.		SCDEC	4-8-748.08	4 7.	-21-75
548517.		SCDEC		22-74 12.	-21-75 1
0.40010 0.40010	405650.0721452. 410243.0715401	SCDEC	4-8-74 9.41	10-22-74 8. 74	4-21-75 9.78
848520		SCDEC	74 12	73-74 11	4 <u>C</u>
848521	072164	SCDEC	. 4	23-74 6.	-21-75 7.
848522.		SCDEC	8-74 4.	23-74 3.	-23-75 4.
S48577.	410149, 0715832.	SCDEC	4-8-74 4.17	(i)	3-75 3.
548578.		SCDEC	8-74 10.	4	10.
848579.		SCDEC	-74	4	4-23-75 3, 22
848580.		SCDEC	-74	23-74 2.	75 3.
849898				4 0)	
S50474.		AMAGANSETT FD	4-8-74 3.23	4 2	ത്
852642.			4-8-74 2.54	4 Q	,
852643.		2	-74 3.	4 ©	4-22-75 2.75
852644		AMAGANSETT FD	-74 2.	-21-74 1.	-75
852645			2.	10-21-74 2.07	4-22-75 2.06
S52646.		i.	4 4.	23-74 4.	
S52647.	405339, 0722918,	AMPTO	10-74 2.	4 2	-21-75 3.
00170400		J J J	0-74 6.	22-74 6.	-21-75 7.
80104V		E E	8-74 8.	বা	-11-75 8.
S52650.		Same	74 10.	4	10.
552651.			- 8-74 8.	2-74 7.	-21-75 8.
552652			74 6.	23-74 5.	4-21-75 6.78
552653		2	-10-74 17.	4.	-22-75 16.
552654		SAG HARBOR FD	74 5.	21-74 3.	-75
852655	,		-10-74 2.	21-74 1.	-75 2.
552657.		NOYACK FD	-10-74 21.	21-74 19.	-75 20.
8077936 0807 80	405411.0/22619.		10-74 6.	22-74 4.	-21-75 4.
0.0000			0-74 6	22-74 5.6	-21-75 6.8
002000.	400240.0/2221/. 405900.0700010	OUCHHAMPIUM FU	0 14 4.	22-74 3.	-21-75 4.
950460			1.4 0.	22-74 5.	-21-/5 6.5
552662			/# # 10 10 10 10 10 10 10 10 10 10 10 10 10 1	1,4 4, C	-21-75 3.
000000			+ + + 1	# 'C #/-77	-21-/5 4.
507654 507664			4 0 1/4 4 1/V	4 6 4	-21-75 4.
852666			0 0 1 / 4 4.	7-74 4.1	-21-/0 4.6
852667	070000		+ 4 C C C	すり まん	.0 0/-17-
000007. 00006607.		1 20	0 4/100	7-74 5. 2	-21-75 6.
000000			1 0 1	2-74 11.	-22-75 12.
001007			10-74 12.	1 4/-77-	1 6/-77-
034070.			10-74	-22-74 8.	4-22-75 9.18
0.0400	ó	BRIDGERAMFION FU	4-10-74 4, 32	10-22-74 3, 47	4-22-75 4.06

852672. 852673. 852674.	405602, 0721807, 405603, 0721736, 405624, 0721718,	BRIDGEHAMPTON FD BRIDGEHAMPTON FD BRIDGEHAMPTON FD	4- 8-74 12. 4- 8-74 10. 4- 8-74 11.	34 11 35 35)-22-74 1)-22-74 1	0.87 9.20 0.26		2, 75 0, 19 1, 26
S52675.	0.0	25	8-74 9	07 10	INC	7.94	-22-75	19.16
552677.		BRIDGEHAMFTON FD	- 8-74 Ø	ल २०व	4 14		-75	8. 38 8. 38
\$52678.			- 8-74 7.	100 1	M (-22-75	
001007V			1 8-74 1.	mai 4	\mathbf{S}_{i}^{2}		-22-75	
552682.				part yand	0-22-74	4. 45 6. 70	27	
S52683.	,	S	- 8-74 6.	-	22-7	,	-22-75	
S52684.			- 8-74 6.	gang .	-22-7	6.72	-22-75	
0077600 0077606	405/25.0/2143/.	FACTHAMPION FU	74 11.	07 10 72 10	-22-74 1			- Z = C
\$52687.		. LL	- 8-74 4.	4	-21-7	4. 07	-22-75	
822688.		LL.	-74 1.	i semi	-21-7		-22-75	
852689.	405932, 0720625,	AMAGANSETT FD	- 8-74 2.	****	21-74		-22-75	
852690.		ш.	- 8-74 1.	-poord	21-74		-22-75	
000Z6X1.		MANUTAMENTON FO	- 8-74 2.	grand :	-21-74		-22-75	
302676. 000707.			- 9-74 7.	yani .	21-74		-23-75	
0002074		HAMP CON	1 9-74 80.	- purp	-21-74	54	-23-75	
8016890. 080400	410113.0/2185%.	OAG HAKBOK FU	1 9-74 Z.	and 4	-21-74	4	-22-75	
0.0000000000000000000000000000000000000		THEFFORE	- y-/4 1.		71-74		-22-75	
801877. 05010800	410004.0/21850.	OAG HAKBUK FU	- 9-74 0.	dwell d	21-74		-22-75	
557701			0 0	(·	4/-		4-22-75	75.00
852702.		HOLLOW FD	- y-/4 5. - 9-74 4	~4 ,	21-74	7 7 6 7 7 6 7 7 6	7-27	,
852703.	07212	HOLL	- 9-74 5.	,	21-74		4-23-75	10,
852704.		HOLLOW	-74 3.	dent	-21-74	15	23-75	
852705.		GRASSY HOLLOW FD	- 9-74 2.	7	-74	80	23-75	
552706.		SY HOLLOW	- 9-74	77	21-74	23	-23-75	
806000.	410041.0/2122/.	LOW FD	- 9-74	,	21-74	46	-23-75	
000001. 850057	410044, 0/21140, 410120, 0/21035	THREMILE HANBON FU	4- v-74 w.	64 10-	21-74	(O) (-23-75	3, 24
853053		HARROR	0-74 0		4/-17	N + 131 \	23-70 20-48	
\$53054.		E FD	- 9-74	81 10	-21-74	100	-22-75	
S53055.	410252, 0720905,	سقا	-74 2.		-21-74	98	-22-75	
S53056.		L	-74 1.	1	21-74) ()) ()	-22-75	
853057.			74 2.	58 10-	21-74	00 00	-22-75	
853058			-74	01 8	-21-74	41	22-75	
553059.			9-74	-panel	21-74	62	22-75	
0.00194		2 2	10-74 7.	40 10-	21-74	41	21-75	
5319		HOLE	-74 0.	0 10	1-74	32	-75	0.00
が (2 20 20 20 10 10 10 10 10 10 10 10 10 10 10 10 10	10012, 07208	BARNS HOLE FD	74		1-74	5.06	22-7	5. 27
000177.	410010.0721850.	¥ ECK	-74	03 10	-21-74		1). 56

1 s, suffolk county 2 should be read 40°57'26", 072°09'37" 3 fd, fire department

TABLE 2. -- CHEMICAL ANALYSIS OF WATER FROM WELLS

	NON- CAR- BONATE HARD- NESS	40 8 4 4 8 4 4	0 1 0 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	20 20 23 23 23	11 56 100 120	00mm4	144 130 180 10	21 8 8 27 7	N V M V M
	HARD- NESS (CA, MG) (MG/L)	24 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4	20 4 0 20 1 0 5	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	56 61 110 130 15	99999	153 130 190 21 22	21 21 26 12	0112 4 7 4
	DIS- SOLVED NITRATE (N)	23.1 8.4 1	% 5 1 1 1 5 %	2. 2. 3. 8. 8. 8. 9. 9. 9. 9. 9. 9. 9. 9. 9. 9. 9. 9. 9.	4 3 W W 1 4 3	000	110 10 88	63	05
	DIS- SOLVED NITRITE (N) (MG/L)	001	85185	1000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	89 89	180.18	10 0 0	00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
<u> </u>	BICAR- BONATE (HCD3) (MG/L)	41000	8 4 3 V 4	44 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	55 6 7 11 16	71 16 8 8 8	11 7 9 14 11	11 16 28 17 17	3 K M M H
OF WATER FROM WELLS	ALKA- LINITY AS CACO3 (MG/L)	0 8 7 8 8	21 20 20	4 4 4 4 0 0 8 2 2 2	გ ზიაგი	4 0 C C 4	\$ 9 Z T T &	404 00040	10 0 0 0 0 H
	PH (UNITS)	4ល្១4ល្ ឃ១+ស4	യെ എന്ന് എർ സ് സ് സ് എർ	လုလုပ္ရပ္ ကေဆးဝဝ႕	⊸ល១ ១៧៧៧៧ ១៧១៣១	ကတ ္ သတ ခံခံဂုံးက်က်	សស់ស្នំស ស្នេសស	დაგაგა 1101	സെ.ഗ്രീസ്സ് ഗോയധധഎ
CHEMICAL ANALYSIS	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	011 108 145 000 000 000 000	57 45 182 168 174	387 410 405 430 425	411 220 320 372 70	70 622 75 77 88	400 450 477 130 135	120 92 126 102 85	80 75 50 115
CHEMIC	TEMPER- ATURE (REG C)	10.0 11.0 12.0 10.0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	11.0 11.0 11.5 12.0 10.0	11.5 12.0 11.0 11.0	10.0 11.0 12.0 10.5 11.0	1000	12.0 12.0 14.0 11.0
TABLE 2	DATE OF SAMPLE	74-04-10 74-10-22 75-04-21 74-04-09 74-04-09	74-10-22 75-04-24 74-04-09 74-10-22 75-04-24	74-04-10 74-10-22 75-01-27 75-01-27 75-01-27	75-04-22 74-04-09 74-10-23 75-04-21 74-04-09	74-10-22 75-04-21 74-04-10 74-10-22 75-04-22	74-04-10 74-10-23 75-04-21 74-04-10 74-10-22	75-04-22 74-04-10 74-10-21 75-04-21 74-04-11	74-10-21 75-04-21 74-04-10 74-10-22 75-04-23
	SEG. NO.	0 01	01	01	01	01	010	01 02 01	01
	LONG- I- TUDE	072 24 44 072 24 44 072 17 35	072 23 31	072 10 49	072 16 47	072 09 47	072 18 16	072 26 32 072 27 12 072 25 54	072 15 35
	LAT- I- TUDE	40 59 38 40 55 07 40 57 56	40 53 09	40 57 56	40 56 28	41 00 34	40 54 38	40 53 15 40 54 21 40 52 21	40 59 06
	LOCAL IDENT- I- FIER	8 88 8831 8833 8833	9888 8	8 8837	88 88 88 88 88 88 88 88 88 88 88 88 88	\$ 15048	s 15332 s 16121	S 22499 S 34644 S 36401	s 46524

DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	8 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	25 22 889 900 102	193 209 211 216 216	209 100 191 201 50	4 4 4 4 4 3 0 4 0 1	211 229 302 73 73	7 2 2 2 2 4 4 4	442000 600000000000000000000000000000000
TOTAL MAN- GANESE (MN) (UG/L)	02 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	000000 00000	4300 210 230 220 220	210 40 20 10	0 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	900 920 900 800 200 200	27 4 8 10 4 0 0 0 0 0	60 30 70 170 100
TUTAL IRON (FE) (UG/L)	3200 1700 370 130 2500	2900 1000 11000 460 280	280 180 180 110	310 480 810 640	320 540 2600 670 1200	1900 450 2400 420 410	210 320 4000 3000	880 5500 10 110 40
DIS- SOLVED SILICA (SIO2) (MG/L)	चिच् चिच् याच्य १८	. 1. 70.00 2. 20.00 2. 20.00	7.9.9.9.9 0.9.7.7.7	38887 7489	16 17 8.8.8 8.2.8	7.6 7.5 7.9 10	11 16 14 18 7. 6	ក្លុងលុង ១០១40
D1S- SOLVED FLUO- KIDE (F) (MG/L)	ज्यां ज्यां ज्यां ज्यां ज्यां ज्या	. <u>О</u> ееее	Needy	1 2 0 0 0	0 N O O N	0 - 2	N	0440%
DIS- SOLVED SULFATE (SO4) (MG/L)	4 NV 4 O A	23.4 22 123.4 27 124.4 29	27 26 26 27 27	23 33 33 37 37	8 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	100 110 130 14	14 7. 2 12 12 5. 9	ম্ৰ্ৰ্ৰ্ৰ অক্সাজক
DIS- SOLVED CHLO- RIDE (CL) (MG/L)	114 144 144 177 18	8 7 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 9 1 8 9	4997 4927 8088	772 144 22 8	88.9.5. 12.2.1.5.1.5.1.5.1.5.1.5.1.5.1.5.1.5.1.5	25 29 20 21 21	20 10 12 4	14 15 7.9 25 23
DIS- SOLVED FO- TAS- SIUM (K) (MG/L)	3 O H 3 V	୍ ପ୍ରାଧ୍ୟ ୧୦୦୯୦ ୯	ဝေလကဟုပ လ်လ်ထာထာက်	<u>ഺ</u> ൕൕൕ ๑ ഺൕ൛ൕ	00000	ବ୍ୟୁ କ୍ ଞ୍ୟ ଠ ମ ବଠଷ	9 7 9 8 9	4 3 4 7 4
DIS- SOLVED SODIUM (NA) (MG/L)	11 7 % 4 7 % 6		4 4 4 4 4 0 23 3 3 3	4 8 8 7 8 7 2 0 0	ရရတ်လွတ်တွ ဝေလးဝေလးက	- 7 7 8 4 - 7 7 8 4	<u>ო</u> მოდღოდ დ4ობ	9.9.4.51 8.9.7.51
DIS- SOLVED MAG- NE- SIUM (MG)	성성원년 . 80 성교 48		ଲ୍ଭ୍ଲ୍ଲ୍ ⊣ମମ ଅ 4	213671 32243	យល្យកស ឯកឯកឯក	0 / / 0 % 6 / 0 / 0 / 0	೮೮4೮೪ ೪೫೦೪೦	11 11
DIS- SOLVED CAL- CIUM (CA) (MS/L)	44RW. POMOR	. 9 15 12 16	19 19 20 20 21	18 19 32 40 3.7	8 K 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	4 4 ე თ თ ე ს 4 ი ი	0.00.44.4 7.00.00	11 Z . 11 . 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
DATE OF SAMPLE	74-04-10 74-10-22 75-04-21 74-04-09 74-04-09	74-10-22 75-04-24 74-04-09 74-10-22 75-04-24	74-04-10 74-10-22 75-01-27 75-01-27 75-01-27	75-04-22 74-04-09 74-10-23 75-04-21 74-04-09	74-10-22 75-04-21 74-04-10 74-10-22 75-04-22	74-04-10 74-10-23 75-04-21 74-04-10 74-10-22	75-04-22 74-04-10 74-10-21 75-04-21 74-04-11	74-10-21 75-04-21 74-04-10 74-10-22 75-04-23
LOCAL IDENT- I- FIER	ω πω ω πω ω ω ω ω ω ω ω ω ω		8837	S SS S	S 15048	\$ 15332 \$ 16121	S 22499 S 34644 S 36401	8 46524

TABLE 2. -- CHEMICAL ANALYSIS OF WATER FROM WELLS (CONTINUED)

NON- CAR- BONATE	HARD- NESS (MG/L)	00	0 9	190	021	23 11 57 7	6 125 120 140	0, 1 0	21 12 24	4 0 10 15 7	22 22 6 37 10
HARD-	NESS (CA, MG) (MG/L)	9 (13	700	120	4 3 3 4 4 9	10 10 140 140	152 151 1	8 111	12 10 16 20 20	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
DIS- SOLVED	NITRATE (N) (MG/L)	100.	. 02	12	3.2	ლ იე.ბე 4 იად	9 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	100.10	00 00	. 000 . 000 . 1. 5 – 1.	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
1	NITRITE (N) (MG/L)	100	8 8	188	10	8 8 8	000 1000	18818	81881	88188	101188
BICAR-		4 (0)	, , , ,	4 0 0	200	% 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	2 V 8 4 8 8	₩44 <i>\</i> 0	८७५७ ७	9 Z 8 9 Z Z	21 12 11 13 13
ALKA- LINITY	AS CACO3 (MG/L)	988 181	0 20	ഗതാ	16 16	<u>ч</u> Ф 0 10 V И	4 6 4 5 2 5 2 5 2 5 2 5 2 5 2 5 2 5 2 5 2 5	นี้แผลลน	30 L S L L	7 10 7 7 5	17 11 10 9 9
	PH (UNITS)		9.9.9 9.09	ស្ព្រ		ሳ ቢ ቢ ቢ ቢ 4 ቢ / / 1	N 4 4 4 4 8 0 4 4 8	លល្ល ១ ១ ១ ១	ବ୍ୟବ୍ୟବ୍ ଉବ୍ଧ୍ୟର	ନ୍ନପ୍ନେନ୍ ଜେଉନ୍ନ	ବ୍ର୍ଥାପ୍ର ବର୍ଷବଦ
SPE- CIFIC CON- DUCT-	ANCE (MICKO- MHOS)	145	100	370 460	320 212 213	145 280 260 265 65	44 44 0000 0000 0000	68 68 73 70 70	87 60 60 60 60 60	99999 20899	78 196 75 190 81
	TEMPER- ATURE (DEG C)	14.0 0.8.0		12.0		11.0 12.0 11.0 12.0 12.0 9.0	11. 0 10. 0 11. 0 11. 0	11.2 11.5 12.0 10.0 0	11.0 11.0 11.0 10.0	10 0.11 0.09 0.00 0.00	13.0 13.0 12.0 12.0
DATE	OF SAMFLE	74-04-18 74-11-04	74-04-18 75-04-21	74-04-18 74-11-04 75-05-01	74-05-20 74-05-20 74-10-22	75-04-25 74-05-20 74-10-23 75-04-28 74-04-09	74-10-23 75-04-23 74-04-10 74-10-25 75-04-23	74-04-18 74-11-04 75-05-01 74-05-15 74-10-21	75-04-24 74-05-15 74-10-22 75-04-25 74-04-09	74-10-23 75-04-28 74-04-10 74-10-22 75-04-29	74-10-21 75-04-24 74-04-09 74-10-21 75-04-24
	SEQ.	01	01	01	01	01	01	01	01	01	02 01
-9NO-7	I- TUDE	072 14 51	072 13 36	072 20 27	072 19 00	072 18 05	072 12 10	072 21 55	072 22 01	072 19 16	072 26 27 072 26 27
LAT-	1- TUDE	41 00 37	41 01 56	40 56 06	40 57 40	40 56 18	40 58 07	40 55 01	40 56 44	40 58 44	40 53 25
LOCAL IDENT-	FIER	8 47235	8 47236	5 48425	S 48426	S 48427 S 48428	8 48429	S 48430 S 48432	S 48433 S 48437	S 48438	S 48439 S 48440

DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	67	35	- 698 - 698 - 707	130	88 153 144	88 89 112 842	1 0 4 1 4 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1	4 0 0 0	88 88 10 10 10 10 10	104 104 104 108 108
TOTAL MAN- GANESE (MN) (UG/L)	190	20 20 10	4 1 -	00.04	20 20 20 10 13600 20	04 004 004 005	20 70 70 70 70 70	0778 078 078 078 078	450 10 230 150 150	20 20 20 10 10
TOTAL IRUN (FE) (UG/L)	3100	870 720	021 044 047) 	420 340 620 10000 250	720 500 710 860 1100	30 270 100 210 370	460 420 1200 310	8860 4000 230 450	750 2200 210 360 360
DIS- SOLVED SILICA (SIO2) (MG/L)	7 7 7 7 7 7 0	244	0 % 0 0 % 0	ស្ត្រីស្	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	7.4.6.4.7 7.4.6.4.2	7.47.00 0.004.04	000001 00007	ਜਜ਼ਜ਼ਜ਼ ਜਜ਼ਜ਼ਜ਼ਜ਼	13 7. 2 14 7. 2 14
DIS- SOLVED FLUO- RIDE (F)	1.	184	1-0	219	31101	<u> </u>	1 - 0 1 -	0	-0	-44444
DIS- SOLVED SULFATE (SO4) (MG/L)	01 0.00 0.00	၇၁ဝ ကြော်တော်	120 130	79	⊔ 4 4 4 ∕ პზასიე თ	5, 2 100 100 120	40.440. 40.440.	ស្នុល្ភ្ល ឧយៈ០/ ប	10 10 14 14 8 %	ল ককল ক'মভিভিভি
DIS- SOLVED CHLO- RIDE (CL) (MG/L)	12. 13.	1, 16 16	1 6 n 3 10 m	15 16	222 259 11	11 14 14 17	2114	4000000 80000	8,0 11,9,5	0.00 0.00 0.00 0.00 11
DIS- SOLVED FO- TAS- SIUM (K)	1.0) i ()	00.0	f 1 00	4 0 9 4	00000	1 1 1 9	3 4 4 10	n w 0 / w	1
DIS- SOLVED SODIUM (NA) (MG/L)	100	11	001	101	9, 10 4 9, 10 4 9, 10 4 9, 10 4 9, 10 4 9, 10 4,	997799 2871	197.4	୬ ଅଧ୍ୟ ଅଧିକ ୬	ស្នែសល ឯកល្បស់ ឯកល្បស្	21 21 6.8 7.7 7.7
DIS- SOLVED MAG- NE- SIUM (MG)	i vi o	, k	70	K (0)	9 941 0 894	១២២៧១ ਜਿਜੇ ២៤៤	1.77	7 1111 7 1004	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	4 K & 4 K &
DIS- SOLVED CAL- CIUM (CA) (MG/L)	100	r N	1 09 0 -	20 1	1.0	1 4 4 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	୦-	4 / V/V/V/	ಸ್ವನ್ನು 4 ೯೭೮೦ =	41 4 00 00 00 0 1 1
DATE OF SAMPLE	74-04-18 74-11-04	74-04-18 75-04-21	74-04-18 74-11-04 75-05-01	74-05-20 74-05-20 74-10-22	75-04-25 74-05-20 74-10-23 75-04-28 74-04-09	74-10-23 75-04-23 74-04-10 74-10-25 75-04-23	74-04-18 74-11-04 75-05-01 74-05-15 74-10-21	75-04-24 74-05-15 74-10-22 75-04-25 74-04-09	74-10-23 75-04-28 74-04-10 74-10-22 75-04-29	74-10-21 75-04-24 74-04-09 74-10-21 75-04-24
LOCAL IDENT- I- FIER	8 47235	\$ 47236	8 48425	5 48426	\$ 48427 \$ 48428	8 48429	S 48430 S 48432	400 400 400 400 400 400 400 400 400 400	6 48438	\$ 48439 \$ 48440

TABLE 2.--CHEMICAL ANALYSIS OF WATER FROM WELLS (CONTINUED)

NON- CAE- BONATE HARD- NESS (MG/L)	100 100 100	13	190	10 16	10 13 22 17	2 N N N N N N N N N N N N N N N N N N N	7 15 5 0	ស្នេក្	សល្ស ស ហ ស	88 10 10 10
HARD- NESS (CA, MG) (MG/L)	108 110 110	17	122	4 4	44 22 28 27 11	8888 8888 8888 8888 8888 8888 8888 8888 8888	238 22 22 13	16 24 24 31	9999	97 98 17
DIS- SOLVED NITRATE (N) (MG/L)	0.00 54 4	. 29	03		01 44 0 00 00	34 0 9 11 17	1 35	2.8. 4.4. 	1.0 .54 .09	11018
DIS- SÖLVED NITRITE (N) (MG/L)	010	10	188	1 1	0.02	00 00	10.	00 10 10 1	88188	11811
BICAR- BONATE (HCO3) (MG/L)	ଏଉଉ	m v	11 8 21	& O	41 2 7 12 10	8 11 11 10 12	20 23 20 8	14 19 7 27 5	とろろろい	11 6 14 9
ALKA- LINITY AS CACOS (MG/L)	5 7 7	22	9 7 10	35 52	88 7 4 0 0	7 o o o o	16 19 16 7 7	11 16 22 4	ស្រស្ភ4	9 5 1 1 L V V
FH (UNITS)	ણ જું જું જના ન		0,000 0,000		400004 400004	99999 94004	97.989 90.99	ភភព្ល ស ស → ୭ ୭ レ	ស១៩៤୬ ស្រួស្សស្រួ	ល្ល្យល្ល 4 /> ១១០
SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	320 308 340	72 81	665 653 853	220 205	235 137 155 160 67	70 70 175 170 153	128 127 116 260 136	133 290 210 235 100	100 97 98 79 79	1130 90 958 100 760
TEMPER- ATURE (DEG C)	11.0 12.0 12.5			11.0	12. 0 10. 0 11. 0 11. 0	10 11 10 10 10 10 10 10 10	0 0 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	41 11.0 12.0 12.0 12.0 15.0	21 10 10 11 10 11 10 10	0 0 0 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0
DATE OF SAMPLE	74-04-09 74-10-22 75-04-24	74-05-15 75-04-23	74-05-15 74-10-25 75-04-23	74-04-10 74-10-31	75-04-21 74-04-10 74-10-25 75-04-23 74-05-15	74-10-23 75-04-23 74-04-10 74-10-25 75-04-22	74-04-10 74-10-31 75-04-21 74-04-18 74-10-31	74-11-04 75-05-02 74-10-31 75-04-21 74-04-18	74-11-04 75-05-02 74-04-10 74-10-25 75-04-22	74-03-01 74-05-20 74-11-04 74-03-01 74-05-20
SER.	0.1	10	01	01	10 0	01	01	01	0.1	0 10
LONG- 1- TUDE	072 23 48	072 15 40	072 14 52	071 56 01	072 13 21		071 58 32 072 11 04	071 53 55 072 10 32	072 09 30	072 18 41 072 18 46
LAT- I- TUDE	40 53 49	40 58 38	40 56 50	41 02 43	40 58 18	40 58 58	41 01 49	41 03 16 41 01 24	40 58 46	41 01 47
LOCAL IDENT- I- FIER	\$ 48441	\$ 48517	S 48518	\$ 48519	\$ 48520 \$ 48521	8 48522	\$ 48577 \$ 48578	S 48579 S 48580	ა 894 89	\$ 51184 \$ 51185

DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS)	159 187 188	4 6	39 46	101	1.33 1.33 1.33 1.33 1.33 1.33 1.33 1.33	1	441 466 81	72 72 70 70 58	82 142 86 121	90 00 00 00 00 00 00 00	566 592 53
TOTAL MAN- GANESE (MN) (UG/L)	0000	9 9	840	80 20	30 080 100	20	40 20 40 10	80888	100 60 150 50	80 10 40 70	260 50 270 30 180
TOTAL IRÛN (FE) (UG/L)	130 740 590	750	082 082 082 082	160 360	390 3300 640	360	410 2300 1600 620 300	880 490 620 560 460	680 560 2400 2500 230	1000 260 350 2700 890	300 150 700 40 120
DIS- SOLVED SILICA (SIO2) (MG/L)	თ თ თ ი ი ი თ თ ბ ^ ^		걸크걸	20 21	12 0 11 :	77	111 122 9.9.9.9.9.9.6.0.6.0.6.0.0.0.0.0.0.0.0.0.	4113	- N N N -	2,01 7,04 7,04 7,04 7	9,9,0,9,9 1,0,9,9,9,0,9,9
DIS- SOLVED FLUG- RIDE (F) (MG/L)	= = 연.	T.	. .	(9)	ਜ਼ਜ਼ਜ਼ ਾ 	4 1	ਜੁਜ਼ਲਾਜ਼ਲ.	N-N-1-	1.0.4.8.	-08	0.
DIS- SOLVED SULFATE (SO4) (MG/L)	76 80 78 8 4		•ល• ល់ល់់	11	1 7 7 7 C	N ON O LO	១សសសល លំស់សំលំលំ	കുത്തു ചുക് തെയസ ത	6.00 6.00 7.00 7.00 7.00 7.00 7.00 7.00	4000 4000	4 4 0 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
DIS- SOLVED CHLO- RIDE (CL) (MG/L)	25 25 25	122	11.8.2	27 28	30 17 17	21 8. 1	12.8 3.2 8.0 8.0 8.0	20 19 19 27 22	22 51 37 40 15	24 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	300 13 250 260 260
DIS- SOLVED FO- TAS- SIUM (K) (MG/L)	008	1. 2	44	4.0	4.04.4 V V O C	,		3 3 4 0	2.1	2 2 3 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5	6. 7
DIS- SOLVED SODIUM (NA) (MG/L)	1121	6.5	4) RQ	20 11	22115		6. 9 118 17 17	13 10 11 7.5	18 35 10 26	13 10 12 7. 9 6. 7	170
DIS- SOLVED MAG- NE- SIUM (MG) (MG)	6. 7	0.1	2 E	സ്. 4-യ	ପ୍ରାଷ୍ଟ ପ୍ରାଷ୍ଟ୍ର	4	11462 820 70	ପ୍ରପ୍ର ବ୍ରବ	4.1.1.00	성성크크 . 요ㅋㅋ@♡	17 16 2.7
DIS- SOLVED CAL- CIUM (CA) (MG/L)	(9 m) m		9.2	8. 0 1.1	94.40 9000	n l	្រុកស្រួក ភេទ១ភេម	444 4 የየያ	4.7.3.3 5.0.3	8, 99.5 9.40.80	11 8.9 4.1
DATE OF SAMPLE	74-04-09 74-10-22 75-04-24 74-05-15	75-04-23	74-10-25 75-04-23	74-04-10 74-10-31	75-04-21 74-04-10 74-10-25	74-05-15	74-10-23 75-04-23 74-04-10 74-10-25 75-04-22	74-04-10 74-10-31 75-04-21 74-04-18 74-10-31	74-11-04 75-05-02 74-10-31 75-04-21 74-04-18	74-11-04 75-05-02 74-04-10 74-10-25 75-04-22	74-03-01 74-05-20 74-11-04 74-03-01 74-05-20
LOCAL IDENT- I- FIER	S 48441	4851		S 48519	5 48520	\$ 48521	s 48522	s 48577 s 48578	\$ 48579 \$ 48580	8 49898	\$ 51184 \$ 51185

TABLE 2.--CHEMICAL ANALYSIS OF WATER FROM WELLS (CONTINUED)

LOCAL IDENT- I- FIER	LAT- I- TUDE	LONG- I- TUDE	SEQ.	DATE OF SAMPLE	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	FH (UNITS)	ALKA- LINITY AS CACO3 (MG/L)	BICAR- BONATE (HCU3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- EONATE HARD- NESS
s 51185 s 51186	41 01 32 41 00 47	072 18 46 072 18 47	010	74-11-04 74-03-04 74-05-20	13. 0 11. 0	78 185 165	ល់ប្ប	∞ N Ø	11	8	. 16	, 14 39	9 11
\$ 52657	40 59 12	072 22 07	01	74-11-04		280 95		122	118	8	4. w	58 17	2 2
5 52658	40 54 11	072 26 19	01	74-10-23 75-04-21 74-04-10 74-10-21 75-01-27	11.0 12.5 11.0 12.0 11.5	90 90 85 60 47	လက်လုံလုံ လောက်လုံလုံ	44113	17 17 16 16 13	88158	8.8 8.8 1.8 8.8 8.8 8.8 8.8	18 17 19 24 22	40011
8 52666	40 54 34	072 20 40	10	75-01-27 75-04-21 74-04-11 74-10-23 75-04-23	10.0 11.0 10.0 12.0 0	75 77 75 155 287	လုနှင့်နှလုံ ထေသာဝဝန	10 11 7 7	12 14 13 8 8	86186	8.6 21 2.8 2.6 2.6	18 17 18 41 43	8 4 30 76
s 52669 s 52679	40 55 54	072 20 01 072 16 50	010	74-04-11 74-10-23 75-04-21 74-04-10 74-10-23	11.0 12.0 11.0 11.0	400 475 420 285 320	លុល្លូល្ភ 404ស~	9 4 4 22 17	111 5 5 27 21	18518	14 15 5.2	129 160 150 82 83	120 150 140 60 66
S 52683 S 52684	40 56 00	072 15 00	01	75-04-21 74-04-10 74-10-23 75-04-21 74-04-10	12.0 10.0 12.0 12.5	287 325 305 315 220	୬୯୬୧୯ ଅଧ୍ୟର୍ଗ୍ୟ	18 7 9 7 10	22 8 11 8 21	10 00	5. 8. E. 7. S.	88 92 11 98 61	68 88 89 80 80 80 80 80 80 80 80 80 80 80 80 80
	5		01	74-10-23 75-04-22 74-10-23 75-04-22	12.0 12.0 11.0	210 179 140 95	សុស្ស 7400	11800	11 00 00	00	4.8 3.7 03	66 47 18	56 39 18 7

DATE OF SAMPLE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG/L)	DIS- SOLVED SODIUM (NA)	DIS- SOLVED PO- TAS- SIUM (K)	DIS- SOLVED CHLO- RIDE (CL)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F)	DIS- SOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS)
74-11-04 74-03-04 74-05-20 74-11-04	700 00	9/4, 200 = 10 = 0	7.9	4.1	9,821 8,000	8. 1 17 17 17	== =0	99999 9489	830 70 110 720	160 20 0 0 510	4 % 1 \(\hat{\chi}_1 \)
74-10-23 75-04-21 74-04-10 74-10-21 75-01-27	ന് തിതിതി തി ക്	1 99999 3 94700	9 9 8 8 8 8 8 3 9 8 9 9 8 9 8	400000	1 1 1 1 2 2 2) ସ୍ସ୍ପ୍ସ୍) ଅବ୍ୟାପ୍ୟେସ୍	- କ୍ଷ୍ୟାତ୍ୟ	111 12000 10000	710 1500 12000 1900) 000000000000000000000000000000000000	0 00444 0 07007
75-01-27 75-04-21 74-04-11 74-10-23 75-04-23	2,5 2,7 12,5 25 25	921-1212 920-39	7, 7, 1, 1, 2, 2, 1, 1, 2, 2, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,		10 11 19 28 28	2.2.9.4.4 2.2.9.4 2.4.0	्नम् १ गुल्लास्	<u> १९७७</u> ५ १९०५८	150 610 1400 2700 9600	07 70 00 00 00 00 00 00 00 00 00 00 00 0	4 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
74-04-11 74-10-23 75-04-21 74-04-10 74-10-23	00 44 44 87 87 87	9,01 0,9,4,4 7,4	12 11 9.0 15	10 10 10 4.4 7.7	27 28 28 32 32	78 96 84 41 451	H H M O O	ಯಯಯಬಳ ಎ⊶4೦೦	1400 320 220 420 350	600 490 310 20 0	187 274 258 138 168
75-04-21 74-04-10 74-10-23 75-04-21 74-04-10	27 26 30 29 16	4.07.0R R0.0840	41 01 09.99.4 8.60	5.5 11 10 10 2.7	27 28 23 23	44 47 57 57 27	न्न्०न्न	6. 1 7. 1 7. 7 7. 3	400 460 1200 3600 950	20 40 0 40 110	169 138 191 175
74-10-23 75-04-22 74-10-23 75-04-22	12 12 8	ស្ <u>មុ</u> យ្ដ ឆ្មាលម	12 12 5.5 5.5 8	22. 1. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	22 44 24 29 28	27 20 36 7.0	004N	7.37.7.7.7.7.5	30 220 18000 15000	0 20 170 110	123 104 60 32

TABLE 3.--CHEMICAL ANALYSIS OF WATER FROM STREAMS

DATE	DIS- SOLVE MAG- NE- SIUM (MG) (MG/L	D DIS- SOLVED SODIUM (NA)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
	013045	80 - COLD SI	PRING PONI	O TRIBUTA	ARY AT SHI	NECOOK HIL	L NY (LA	Г 40 54 05	3 LONG 07	72 27 08)
APR , 18	1974 -			500	78	and alle	6. 0	1900	100	
		01304590	- SEBONAC	CREEK NE	EAR NORTH :	BEA NY (LA	NT 40 54 5	54 LONG 07	72 25 56)	
APR : 18	1974 -			13	13	Win	6. 9	420	80	
	01	304597 - BI	G FRESH PO	OND OUTLE	ET NEAR NO	RTH SEA NY	/ (LAT 40	55 37 LON	NG 072 24	56)
APR , 18	1974 -		som man	17	11		2. 3	250	210	-
00T 21	2.	3 12	1. 2	18	11	. 1	4. 5	60	100	61
APR , 22		8 11	1. 4	17	10	. 2	1. 0	180	140	50
	0	1304600 - B	IG FRESH F	POND OUTL	ET AT NOR	TH SEA NY	(LAT 40 5	55 49 LONG	3 072 25	04)
APR , 18				31	11		2. 9	500	410	
00T 21		4 17	1. 2	31	13	. 2	7. 7	160	420	88
APR , 22		0 12	1. 4	20	10	. 2	1.8	80	20	55
		01304	630 - MILI	_ CREEK A	AT NOYACK I	NY (LAT 40) 59 35 LO	DNG 072 21	(00)	
APR , 18			nate rade	10	6. 5		7. 9	70	10	***
0CT 21	1.	4 6. 5	. 4	8. 9	6. 1	. 1	9. 0	70	Ō	40
APR ,	1975	5 6.5	. 7	9. 0	5. 4	, 2	8.4	110	10	39
		01304660	- LIGONEE	BROOK AT	SAG HARB	OR NY (LAT	° 40 59 21	LONG 072	2 18 12)	
APR , 18				12	8. 5		1. 8	500	50	
0CT 21		8 9.6	1. 0	14	8. 9	. 0	8. 3	620	160	56
APR / 21		7 11	1. 6	16	7. 6	. 0	7. 9	670	140	57
	013	04665 - LIT	TLE NORTH	NEST OREE	EK NEAR SAI	3 HARBOR N	IY (LAT 40) 59 47 LC	ONG 072 I	5 57)
APR				56	11		9. 9	240	50	
OCT 21			1. 6	57	14	. 2	11	290	10	131
APR / 23		0 18	1. 1	28	8. 7	. 3	10	140	30	74
	Û	1304672 - Ti	ANBARK CRE	EEK AT TH	REEMILE H	ARBOR NY (LAT 40 59	44 LONG	072 11 0	Ġ)
APR /			TOTAL TRANS	, uz	4 6		8. 7	"2 "21"s	90	new supe
29 OCT 22		 3 8.2	. 6	15 15	6. O 6. O	. 1	11	220 1000	100	50
APR / 22	1975		. 9	15	6. 6	. 0	15	470	80	55

TABLE 3. -- CHEMICAL ANALYSIS OF WATER FROM STREAMS (CONTINUED)

DATE	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACOS (MG/L)	BICAR- BONATE (HCOS) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)
	013	:04580 - C	OLD SPRIN	IG POND TR	IBUTARY A	r shin e co	OOK HILL N	IY (LAT 40	54 05 LO	NG 072 27	08)
APR ,											
18		1830	6. 4	11	14	17					
		0130	4590 - SE	BONAC CRE	EK NEAR NO	ORTH SEA	NY (LAT 4	0 54 54 L	ONG 072 2	5 56)	
APR , 18		96	5. 8	7. č	2	3					
		01304597	- BIG FR	ESH POND	OUTLET NEA	AR NORTH	SEA NY (L	AT 40 55	37 LONG 0	72 24 56)	
APR ,		100	6. 3	4. 8	5	6	***				
0CT 21	6. Ü	115	7. 3	1. 0	11	13	. 00	. 18	22	11	5.10
APR	1975 12. 5	100	6. 4	5. 7	7	9	. 00	. 09	15	.8	3, 0
		0130460	O - BIG F	RESH POND	OUTLET AT	NORTH S	EA NY (LA	T 40 55 4	9 LONG 07:	2 25 04)	
APR , :		110	6. 2	5. 0	4	5					
OCT 21	7. 0	160	6. 7	4. 2	11	13	. 00	. 22	34	23	8. 0
APR : :		107	6. 3	6.4	7	8	. 01	. 12	17	10	3. 5
		•	01304630	- MILL CR	EEK AT NOY	ACK NY (LAT 40 59	35 LONG	072 21 00)	
APR , 1		50			7						
0CT 21	8. 0	65	6. 9 7. 4	1. 6	7	8	. 00	. 04	13		
APR 21	1975	65	6. 8	2. 3	7	9	. 01	. 04	12	5 5	2. 7 2. 5
		01304	1660 - LI	GONEE BROO	DK AT SAG	HARBOR N	Y (LAT 40	59 21 LO	NG 072 18	12)	
APR / 1											
18 0CT		75	6. 5	3.0	5	, 6					
21 APR / 1 21		102 109	7. 3 6. 4	1. 2 8. 3	12	15 13	. 00	. 07	21 18	8	5. 3 4. 5
		01304665 -	- LITTLE I	NORTHWEST	CREEK NEA	R SAG HA	RBOR NY (L	_AT 40 59	47 LONG C		
APR , 1											
19 OCT	9. 5	252	6. 3	6. 4	7	8					
21 APR , 1	10.0 1975	160	7. 3	. 6	7	8	. 00	. 10	26	20	3. 9
23	16. 0	130	6. 3	5. 6	6	7	. 01	. 10	14	9	2. 5
		01304672	- TANBAF	RK CREEK A	THREEMI	LE HARBOI	R NY (LAT	40 59 44	LÜNĞ 072	11 06)	
APR , 1 29	.974 	80	6. 5	· 3. O	5	6					
ост 22	11. O	75	6. 9	1. 6	7	8	. 00	. 09	14	7	3. 3
APR / 1 22	.975 13. 5	76	6. 2	7. i	6	7	. 01	. 11	13	7	3. 1
											-

TABLE 3. -- CHEMICAL ANALYSIS OF WATER FROM STREAMS (CONTINUED)

DATE	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SIO2) (MG/L)	TOTAL IRGN (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
	0130	4675 - FRE	SH POND T	FRIBUTARY	AT BARNES	HOLE NY	(LAT 40 :	59 51 LOM	NG 072 07	22)
APR , 1								770	190	
29 0CT 22	2. 4	. 11	. 6	20 19	12 15	. 2	8. 2 10	1100	150	- 61
APR , 1		11	. 7	19	8. 8	. 3	8. 8	1000	190	52
	013046	80 - LAKE	MONTAUK 1	FRIBUTARY	NEAR DITO	CH PLAINS	NY (LAT	41 03 23	LONG 071	55 53)
APR , 1	974									
08 APR / 1				24	22		4. 8	710	150 60	 75
23	. 3.6	14	1. 6	25	17	. 3	3. 6	440	50	/3
	0130468	3 - LAKE M	IONTAUK TE	RIBUTARY	#2 AT DITO	H PLAINS	NY (LAT	41 02 47	LONG 071	54 43)
APR , 1	974		***	75	20		. 6	580	60	
	013046	.86 - OYSTE	R POND TE	RIBUTARY	NEAR MONTA	AUK POINT	NY (LAT	41 03 54	LONG 071	53 14)
APR , 1	974			26	13		2. 6	260	150000	
08 APR / 1 23		14	. 9	26	8.5	. 2	3. 0	330	30	57
				BUTARY #2	NEAR MON	TAUK POIN	T NY (LAT	41 03 58	B LONG 07	1 53 06)
APR . 1	974							400.0	100	
08 APR , 1 23	975 3. 6	18	1. 2	30 30	20 16	. 4	8. 4 8. 3	420 490	130	84
20										
	013	04693 - HO	OOK POND	TRIBUTARY	AT EASTH	AMPIUN NY	(LAI 40	5/ 34 LUI	NG 072 10	42)
APR , 1	974			29	19		9. 4	590	190	
0CT 22	4. Ŭ	19	3. 6	30	20	. 1	10	250	140	129
APR , 1 22	.975 3.8	19	3. 6	29	21	. 0	9. 7	480	130	117
	013046	97 - GEOR	GICA POND	TRIBUTAR	RY #2 AT M	IDHAMPTON	NY (LAT	40 57 10	LONG 072	13 48)
APR , 1										
29 00T				69	7.0		7. 6 8. 1	90 150		
22 APR - 1 22		61 77	. 8	98 120	7. 9 7. 9	. 1	8.0	210		
					NRY AT MIDH					4 20)
APR > 1	974									
19 0CT	. 7/4			13	4. 0		8. 9	110	30	
22 APR > 1		6. O	. 5	10	6. 2	. 0	7. 3	340		
22	1. 4	7. 9	. 8	12	6. 3	. 1	8. 6	60	20	42

TABLE 3. -- CHEMICAL ANALYSIS OF WATER FROM STREAMS (CONTINUED)

DATE	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACOS (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)
		01304675	- FRESH	POND TRIB	UTARY AT I	BARNES HO	ILE NY (LA	iT 40 59 5	1 LONG 07	2 07 22)	
APR ,						_					
29 00T		108	4. 8	127	4	5					
22 APR , 22	9. 0 1975 10. 0	110 95	4. 6	40 . 0	0	1	. 00	. 03	16	15	2. 5
										11	1. 5
	(01304680 -	LAKE MON	ITAUK TRIB	UTARY NEAR	R DITCH F	LAINS NY	(LAT 41 0	3 23 LONG	071 55 53	3)
APR ,		148	5. 4	19	2	3		man 3000			
PR / 23		138	6. 7	2. 2	6	7	. 01	. 40	26	20	4. 5
	0	1304683 - 1	LAKE MONT	AUM TETEL	TARV #2 A3	r nimou e	ATNO NV	(LOT 41 6	7 47 LONG	071 54 43	
			LAKE : IOI41	HOR TRIDO	1AK1 #2 A	DITON	CHINS IVI	(LA) 41 0.	2 47 CONO	071 34 43	, ,
APR , 08	1974	299	5, 5	15	2	3					
	,	11004404 =	overep p	OND TELLBU	TABY NEAD	MONTALIK	DOINE NV	O ATTAL O	o ea conc	577 FO 14	
	,	01304686 -	UTSIER F	OSIAL DNO	IART NEAR	MONTAUK	PUINI NY	(LAI 41 0.	3 34 LUNG	071 53 14	• •
APR , 08	1974	124	4, 9	463	19	23	PROGRAMMENT	Non-uniqu			
PR / 23		115	5. 2	10	1	1	. 01	. 00	14	13	1. 7
	0.17	204460 0	VOTER BOX		51/ NO NEAR						
	01:	304689 - 0	YSIER PUN	M IKIBULA	RY #2 NEAF	CMUNTAUK	. PUINI NY	(LAT 41	03 58 LON	3 071 53 0	16)
4PR , 08	1974	160	5. 7	9.6	2	3					
APR , : 23	1975 13, 5	154	6. 3	3. 2	3	4	. 01	. 03	25	22	4. 2
		0130469	3 – HOOK	POND TRIB	JTARY AT E	: ASTHAMPT	ON NY (LA	T 40 57 3	4 LONG 07:	2 10 42)	
nee.	4.574										
APR , 19 DCT	10. 0	200	6. 4	15	19	23			****		
22 APR ,	8.0	225	7. 4	1. 7	22	27	. 03	3. 7	49	27	13
22	13. 0	218	6. 3	19	20	24	. 01	1. 4	48	28	13
	•	01304697 -	GEORGICA	POND TRI	BUTARY #2	AT MIDHA	MPTON NY	(LAT 40 5	7 10 LONG	072 13 48)
APR ,	1974										
29 DCT		258	6. 1	8. 9	6	. 7					***
22 APR ,		320	6. 0	11	6	7	. 00	. 03	17	12	4. 5
22		438	6. 0	9. 6	5	6	. 01	. 00	14	9	3. 1
		01304700	- GEORGIC	A POND TR	IBUTARY AT	MIDHAMP	TON NY (L	AT 40 57 (DI LONG OT	72 14 20)	
APR	1974 9. 0	75	6. 1	8. 9	6	7				700 May	
22		60 60	5. 4	45	د د	7	. 00	. 05	15	10	2. 9
APR	1 975	72	5.8	14	ຶ. 5	6	. 01	. 35	10	5	1.5
***	12.0	12	J. J	. 7	,	٠	. 01	. 50	10	Ų.	1. 0

TABLE 3.--CHEMICAL ANALYSIS OF WATER FROM STREAMS (CONTINUED)

DATE	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SOBIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
	01304	4730 - P0)	XABOGUE PO	OND OUTLE	T AT SAGA	PONACK NY	(LAT 40 :	55 48 LONG	072 17	16)
APR , 19 18 OCT	74			22	40		8. 4	420	50	
22	5. 5	11	2. 6	23	43	. 1	9. 4	180	10	134
APR / 19 21	4.9	12	3. 6	23	42	. 1	7. 8	460	30	136
	013047	33 — HAYGE	ROUND COVE	E TRIBUTA	ARY #2 AT	HAYGROUND	NY (LAT	40 55 25 L	ONG 072	20 08)
APR , 19 18 OCT	74			23	64		6. 5	30	50	
21 APR / 19	7. 6	11	3. 8	24	82	. 1	7. 6	0	20	202
21	3.8	8. 3	3, 8	16	40	. 1	4. 8	510	90	105
	01304	734 - HAY(GROUND COV	Æ TRIBUT	ARY AT WA	TER MILL N	IY (LAT 4	0 55 15 LO	ONG 072 2	(0 26)
APR / 19	74			18	39		6. 3	70	80	- -
OCT 21	5. 4	7. 9	3. 8	18	43	. 1	8. 5	100	50	129
APR / 19 23	4.6	8. 2	4. 2	17	37	. 1	7. 2	100	70	128
		01304739	9 - MILL O	CREEK AT	WATER MIL	NY (LAT	40 54 34	LONG 072	21 25)	
AFR : 19	74			18	56		. 1	110	50	
0CT 21	7. 7	9. 5	2. i	22	69	. 1	3. 1	30	o	164
APR / 19 23	75 5.8	9. 0	2. 8	20	60	. 2	. 1	230	210	139

TABLE 3.--CHEMICAL ANALYSIS OF WATER FROM STREAMS (CONTINUED)

			-					(001111	.,,,,,		
DATE	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)
		01304730	- POXABO	GUE POND (DUTLET AT	SAGAPONA	CK NY (LA	T 40 55 4	B LONG 07:	2 17 16)	
APR , 18	14. 0	230	6. 4	8. 3	11	1:3	on opp				
22 APR /	1975	225	6. 9	3. 4	14	17	. 00	2. 3	75	61	21
21	12.0	230	6. 4	8. 9	11	14	. 01	3. 7	68	56	19
	0	1304733 -	HAYGROUN	D COVE TRI	BUTARY #2	AT, HAYG	ROUND NY	(LAT 40 5	5 25 LONG	072 20 08	;)
APR / 18		300	6. 1	14	9	11					
21 APR ,		355	5. 2	121	10	12	. 00	6. 4	110	100	32
21		181	6. 7	4. 8	12	15	. 01.	. 89	58	46	17
		01304734	- HAYGROU	ND COVE TE	RIBUTARY A	T WATER	MILL NY (LAT 40 55	15 LONG C)72 20 26) ·	
APR , 18		210	6. 2	12	10	12				WW Asia	
21 APR /		237	5. 1	114	7	9	. 00	3. 8	75	67	21
29		195	5. 9	12	5	6	. 01	6. 7	61	56	17
		01:	304739 -	MILL CREEK	CAT WATER	MILL NY	(LAT 40 !	54 34 LONG	3 072 21 2	25)	
APR / 18		225	6. 6	3. 6	7	9		name solve	100	one see	
21 APR >		328	7. 2	3. 5	29	35	. 00	. 24	110	85	33
23		249	6. 6	6. 1	14	17	. 01	1. 5	89	75	26

[Discharges are in cubic feet per second] Table 4.--Discharge of streams

Station						Streamflow data	ow data		
number	ion Name of stream	Latitude	Longitude	Date	Discharge	Date I	Discharge	Date	Discharge
01304580	Cold Spring Pond Tributary at Shinnecock Hills	40°54'05"	072°27'08"	4-18-74	0.12	1	1	1	ì
01304590	Sebonac Creek near North Sea	40°54'54"	072°25'56"	4-18-74	0.35	10-22-74	no flow	4-19-75	60.0
01304597	Big Fresh Pond Outlet near North Sea	40°55*37"	072°24'56"	4-18-74	1.79	10-25-74	no flow (shallow)	4-19-75	1.66
01304600	Big Fresh Pond Outlet at North Sea	40°55'49"	072°25'04"	4-18-74	2.06	10-25-74	0.16	4-19-75	2.02
01304630	Mill Creek at Noyack	40°59'35"	072°21'00"	4-18-74	1.19	10-23-74	65.0	4-20-75	0.71
01304660	Ligonee Brook at Sag Harbor	40°59'21"	072°18'12"	4-18-74	0.61	2 10-23-74	shallow	4-20-75	0.07
01304665	Little Northwest Creek near Sag Harbor	40°59'47"	072°15'57"	4-19-74	0.55	10-23-74	95.0	4-19-75	0.87
01304672	Tanbark Creek at Threemile Harbor	40,28,44"	072°11'06"	4-29-74	0.48	10-22-74	0.40	4-19-75	0.33
01304675	Fresh Pond Tributary at Barnes Hole	40°59'51"	072°07'22"	4-29-74	0.12	10-21-74	0.04	4-21-75	0.21
01304680	Lake Montauk Tributary near Ditch Plains	41°03'23"	071°55'53"	4-18-74	0.27	10-21-74	dry	4-18-75	0.67
01304683	Lake Montauk Tributary 2 at Ditch Plains	41°02'47"	071°54'43"	4-08-74	0.24	10-21-74	dry	24-18-75	shallow
01304686	Oyster Pond Tributary near Montauk Point	41,03,24"	071°53'14"	4-08-74	96.0	10-21-74	dry	14-18-75	3.51
01304689	Oyster Pond Tributary 2 near Montauk Point	41,03158"	071°53'06"	4-08-74	0.31	10-21-74	dry	4-18-75	0.76
01304693	Hook Pond Tributary at East Hampton	40°57°34"	072°13'42"	4-19-74	0.70	10-21-74	0.40	4-21-75	0.49
01304697	Georgica Pond Tributary 2 at Midhampton	40,27,10,,	072°13'48"	4-29-74	0.24	10-22-74	0.18	4-21-75	0.11
01304700	Georgica Pond Tributary at Midhampton	40°57'01"	072°14'20"	4-19-74	95.0	10-21-74	0.10	4-21-75	0.12
01304730	Poxabogue Pond Outlet at Sagaponack	40°55'48"	072°17'16"	4-18-74	3.20	10-22-74	1.50	4-20-75	3.51
01304733	Hayground Cove Tributary 2 at Hayground	40°55'25"	072°20'08"	4-18-74	97.0	10-25-74	0.17	4-20-75	0.32
01304734	Hayground Cove Tributary at Water Mill	40°55'15"	072°20'26"	4-18-74	0.87	10-22-74	0.36	4-20-75	0.45
01304739	Mill Creek at Water Mill	40°54'34"	072°21'25"	4-18-74	3.95	10-24-74	1.27	4-21-75	4.80
Constitution of the Consti	**************************************								

1 Snowmelt runoff
2 not measureable

Table 5.--Major estimated public-supply withdrawals on the South Fork, Long Island, from 1970 to 1975 [Records from New York State Department of Environmental Conservation]

			Pu	Pumpage, in	nillion	gallons	per day	1
Owner	Location	Aquifer ¹	1970	1971	1972	1973	1974	1975
Suffolk County Water Authority	East Hampton	υ×	.63	.73	.58	4.86.	4.97 .06	1.30 .08
Suffolk County Water Authority	Southampton	७घ	.77	.15	.57	. 28	.30	.53
Suffolk County Water Authority	Sag Harbor	Ů	.27	.30	.27	. 28	.25	. 29
Amagansett Water Company ²	Amagansett	ŋ	. 24	.33	.24	.47	.26	60.
Bridgehampton Water Company	Bridgehampton	IJ	60.	60.	.13	.14	.14	.12
Montauk Water Company ³	Montauk	Ö	.20	.24	.18	.07	1	1
Montauk Air Force Base	Montauk	IJ	.03	.03	.03	.03	.03	.03
Total		Э W	2.23	2.33	2.00	2.18	2.14	2.36

¹G, upper glacial aquifer; M, Magothy aquifer
²Service taken over by Suffolk County Water Authority in May 1974
³Service taken over by Suffolk County Water Authority in May 1973
⁴Includes service previously operated by Amagansett and (or) Montauk Water Companies